Predictive factors for psychiatric morbidity among women with infertility attending a gynaecology clinic in Nigeria

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Abstract
Objective: To determine the psychosocial and clinical factors that are associated with psychiatric morbidity among women with infertility attending a Nigerian gynaecology clinic. **Method:** Over a four month period, 320 respondents (160 in the study group and 160 in the control group) were interviewed using a proforma (designed by the authors) and a screening instrument, General Health Questionnaire version 30 (GHQ-30). All probable cases with a score of 5 or more on GHQ-30 were interviewed using the Present State Examination (PSE). Psychiatric diagnosis was made in accordance with the diagnostic criteria of the 10th edition of the International Classification of Diseases (ICD-10). **Results:** The infertility rate among the study group was found to be 25.8% with primary and secondary infertility rates constituting 21.9% and 78.1% respectively. The prevalence of psychiatric morbidity among women with infertility (48.8%) was significantly more than that in the control group (11.2%) ($\chi^2 = 51.80$, $p < 0.0001$). Lack of support from husband ($\chi^2 = 15.31$, $p < 0.001$), lack of support from husband's relatives ($\chi^2 = 39.60$, $p < 0.0001$), discrimination ($\chi^2 = 69.91$, $p < 0.0001$) and history of induced abortion ($\chi^2 = 30.40$, $p < 0.0001$) were found to be significantly associated with psychiatric morbidity among patients with infertility when compared with the fertile control population. There was no significant difference in the rate of psychiatric morbidity between women with primary infertility and those with secondary infertility ($\chi^2 = 0.03$; $p = 0.87$). **Conclusion:** Psychiatric morbidity is significantly more common among patients with infertility as compared with those without. There was a significant association between psychiatric morbidity and absence of support from husband and his relations, presence of discrimination, and a history of induced abortion. We suggest more public enlightenment on the need for moral/ psychosocial support to women with infertility. In addition, more efforts should be made towards early screening and identification of cases of psychiatric morbidity among patients with infertility.

Key words: Predictive factors; Psychiatric morbidity; Infertility; Nigeria

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Introduction

Infertility is defined as the inability to establish a pregnancy within a specified period of time, usually one year, in a couple having regular unprotected sexual intercourse.[1,2,3] Primary infertility is that in which there has been no previous pregnancy while secondary infertility is that in which there has been a previous pregnancy, irrespective of the outcome.[1,4,5] Globally, about 8% of couples experience some form of infertility problem during their reproductive lives.[2] In the United States National survey, prevalence of infertility was 30.4% with secondary infertility constituting 69.6%.[3] In Africa, up to 65% of gynaecological consultations are for infertility.[1] In Nigeria, about 15% of married couples aged 19 to 45 years have various forms of infertility problems.[4] Of these, 23.6% had primary infertility, 28.3% had secondary infertility, while the remaining 48.1% had other gynaecological disorders.[6]

Various aetiological factors have been found to contribute to infertility among different populations. These include ovulation disturbances (10-15%), pelvic factors mainly tubal

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occlusion following infectious causes (30-40%), abnormalities in males (30-40%), abnormalities of the cervix (10%-15%) and unexplained causes (10%).[1] In Africa, the major cause of infertility is infection (50-80%) and includes Sexually Transmitted Diseases (STDs), post-abortal and puerperal sepsis. Psychosocial factors such as stress can also influence fertility in various ways. For instance, stress could, through the limbic system affect Gonadotrophin Releasing Hormone pulsatility, cause low serotonin levels which could lead to increased prolactin level with a consequent negative impact on ovulation and also cause functional abnormalities of the immune system which may have a negative influence on fertility-related antibodies.[7] Infertility, therefore, is not solely a medical problem as it could also impose psychological stress on a marriage or relationship.[8] Such psychosocial consequences include anxiety, depression and marital difficulties.[9] In resource-poor countries where children are highly valued for cultural and economic reasons, childlessness is often seen as a great misfortune which causes unhappiness.[10] Motherhood, therefore, is often the only means through which women can enhance their status within their family and the community.

In non-psychiatric units such as gynaecological wards, mental disorder is little detected by the health team.[11] Any effort aimed therefore, at increasing the awareness of presence of psychiatric morbidity among patients with infertility will be worthwhile. Such knowledge will enhance early identification, treatment and mental stability of these patients. It is hoped that such measures will have positive impact on the treatment of infertility.

Method

Study setting

The study was conducted at the University of Ilorin Teaching Hospital (UITH) which is located in Ilorin, the capital of Kwara State in the central region of Nigeria. The hospital renders services to residents of Kwara State and the neighbouring towns of Oyo, Osun, Niger, Kogi and Ondo States. The maternity wing of UITH, which provides obstetrics and gynaecological services is located about five kilometres from the main teaching hospital. An average of 160 patients are seen monthly at the gynaecological clinics for various gynaecological conditions.

Study population

Patients with infertility who presented to the three gynaecologic clinics constituted the study population while healthy fertile non–pregnant female staff of UITH served as the control group. In this study, a healthy subject is defined as one who has not been diagnosed as having any chronic medical disorder. The exclusion criteria are subjects or controls with a previous history of psychiatric illness and inability to understand or speak English or Yoruba (the local language spoken by majority of people in the study location).

Instruments

Data on sociodemographic and obstetrics/gynaecological characteristics of respondents were obtained using a proforma that was designed by the authors. The clinical data of respondents in the study group were extracted from their case notes while data from the control group was obtained directly from them during interview. In the proforma, some expressions were used and were operationally defined as follows: ''support of husband'' was explained to the respondents thus: 'has your husband been quarreling with you or has there been a decrease in the way your husband cares for you?' Also, ''support of husband's relatives'' was explained to the respondents thus: 'have your husband's relatives been quarreling with you or urging him to divorce you'? ''Discrimination'' was explained thus: 'have other people (neighbours, friends and colleagues) been behaving to you in any negative way or have you been treated in anyway that is not pleasing to you? In addition to the proforma, the 30-item version of the General Health Questionnaire (GHQ-30) was used to screen respondents for psychiatric morbidity.[12] A research assistant was trained to read out the Yoruba version of the GHQ-30 to non-literate patients and to record their responses. The Present State Examination Schedule (PSE), which is a semi-structured interview schedule for assessing psychopathology, was used to interview respondents with a view to making ICD-10 compatible diagnoses.[13]

Ethics

Approval for the study was granted by the Ethics and Research Committee of UITH, Ilorin, Nigeria. The consent of each participant was sought and obtained. Also, the permission of the managing consultant gynaecologists was obtained.

Procedure

A pilot study was conducted before commencing the main study. This was aimed at pre-testing the instruments that were be used in the main study. Essentially, the subjects' responses were good and unambiguous. This might be because the instruments have been validated in previous studies in the same environment.[6]

All consenting eligible patients with infertility who presented to the three gynaecology clinics over a four month period were included in the study. After assessment by a gynaecologist, each patient with a diagnosis of infertility completed the data collection sheet on socio-demographic data which was administered by a trained research assistant. Respondents who were literate were allowed to complete the GHQ-30 on their own while non or poorly literate respondents were assisted. Respondents with infertility who had a score of 5 or above on GHQ-30 were regarded as psychiatric cases.[6] Thereafter, they were interviewed using the PSE Schedule (English version for literate patients and Yoruba version for non-literate patients). Psychiatric diagnoses were made in accordance with ICD-10 criteria. Each patient with infertility was matched (for age and socioeconomic status) with a control group of consenting fertile non-pregnant healthy female staff of UITH. Socio-economic statuses were defined in accordance with the Registrar General classification.[14,15]

Relevant information was extracted from each patient's (study group) case notes. These included documented cause(s) of the infertility, coexisting physical illnesses, type and duration of infertility, previous and present treatments for infertility, regularity of menstrual period, adequacy of menstrual flow, presence/absence of amenorrhea, history of induced/septic abortion and other gynaecological infections.

Data analysis

The data was analysed using the EPI-INFO software. Frequency tables were generated together with relevant cross tabulations. Means were compared using Analysis of Variance (ANOVA) while proportions were compared using chi-square test. The level of statistical significance was set at 5% for two-tailed tests.

Results

Within the study period, 647 patients attended the gynaecologic clinics for various gynaecological problems including infertility. One hundred and sixty-seven (167) patients with infertility (25.8% of total attendance) attended the three gynaecologic clinics during the study period. Seven patients (4.2%) were excluded from the study (two due to language barrier and five due to lack of consent). Thus, a total of 160 respondents (95.8% response rate) with infertility participated in the study while 160 fertile non-pregnant females served as the control group. In the study group, 107 patients were interviewed in English language and 53 in Yoruba language, while in the control group, 131 subjects were interviewed in English language and 29 in Yoruba language.

Socio-demographic and obstetrics/gynaecological characteristics of study and control groups (Tables I and II)

Both groups were comparable in terms of age, duration of marriage, religious inclination and social status. However, there was significant difference between the two groups in terms of number of children ($\chi^2 = 171.60$, $p < 0.0001$). Also, more respondents in the study group had unsupportive husbands ($\chi^2 = 15.31$, $p = 0.0010$), unsupportive husband's relatives ($\chi^2 = 39.60$, $p < 0.0001$), and also suffered discrimination ($\chi^2 = 69.91$, $p < 0.0001$) due to infertility.

There was no significant difference between the two groups in terms of presence of post-abortal sepsis, but there was a significant difference in terms of menstrual period regularity ($\chi^2 = 12.96$, $p < 0.001$), menstrual flow normalcy ($\chi^2 = 27.89$, $p < 0.0001$) and induced abortion ($\chi^2 = 30.40$, $p < 0.0001$).

Prevalence of psychiatric morbidity

The prevalence of psychiatric morbidity in the study group was found to be 48.8% which was significantly more than the prevalence of 11.3% found in the control group ($\chi^2 = 51.80$, $p < 0.0001$). Most of the patients with infertility had depressive illness (37.5%) while the remaining had generalized anxiety

Table I: Socio-demographic characteristics of the study and control groups

Variables		*Study N = 160 (%)*	*Control N = 160 (%)*	χ^2	*p*
Age	20 – 24 25 – 29 30 – 34 35 – 39 40 – 44 Mean	1 (0.6) 42 (26.3) 51 (31.9) 47 (29.3) 19 (11.9) 32.78 ± 4.70	3 (1.9) 39 (24.4) 54 (33.7) 49 (30.6) 15 (9.4) 32.91 ± 4.50	0.06*	0.8006
Years of marriage	0 – 4 5 – 9 10 – 14 15 – 19 20 – 24 Mean	54 (33.8) 51 (31.8) 42 (26.3) 10 (6.3) 2 (1.9) 7.55 ± 7.2	35 (21.9) 65 (40.6) 57 (35.6) 3 (1.9) 0 (0.0) 7.97 ± 3.67	0.24*	0.6212
Number of children	0 1 – 2 3 – 4 ≥ 5	92 (57.5) 58 (36.3) 9 (5.6) 1 (0.6)	0 (0.0) 54 (33.8) 97 (60.6) 9 (5.6)	171.60	0.0000
Religion	Christianity Islam	68 (42.5) 92 (57.5)	78 (48.8) 82 (51.2)	1.02	0.3100
Social status (Collier et al, 1999)	Group 1 Group 2 Group 3 Group 4 Group 5	1 (0.6) 24 (15.0) 58 (36.3) 59 (36.9) 18 (11.2)	1 (0.6) 24 (15.0) 58 (36.3) 58 (36.3) 19 (11.8)	0.02	0.9900
Family Setting	Polygamous Monogamous	49 (30.6) 111 (69.4)	18 (11.2) 142 (88.8)	16.99	0.0000
Husband supportive	Yes No	133 (83.1) 27 (16.9)	155 (96.9) 5 (3.1)	15.31	0.0010
Husband's relatives Supportive	Yes No	123 (76.9) 37 (23.1)	160 (100) 0 (0)	39.60	0.0000
Discrimination	Yes No	59 (36.9) 101 (63.1)	0 (0.0) 160 (100.0)	69.91	0.0000

% in row brackets * = F Statistics

disorder (11.3%). In the control group, 6.9% had depressive illness while 4.4% had generalized anxiety disorder. Eighteen respondents (51.4%) with primary infertility had no psychiatric morbidity while 17 (48.6%) had psychiatric morbidity. Among the respondents with secondary infertility, 64 (51.2%) had no psychiatric morbidity while 61 (48.8%) had psychiatric morbidity. The rates of psychiatric morbidity in the two groups (primary and secondary infertility) were not significantly different (Yates corrected $\chi^2 = 0.03$, p = 0.8671).

A comparison of socio-demographic characteristics of respondents with psychiatric morbidity in the study and the control groups (Table III)

The two groups were not significantly different in terms of age, duration of marriage, religion, family setting (monogamous or polygamous) and husband's support. However, significant proportions of respondents with psychiatric morbidity in the study group, lacked husband's relatives' support ($\chi^2 = 7.04$, p = 0.0079) and suffered discrimination ($\chi^2 = 11.40$, p =0.0007) when compared with respondents with psychiatric morbidity in the control group.

A comparison of gynaecological characteristics of respondents with psychiatric morbidity with those without psychiatric morbidity within the study group (Table IV)

There were no significant differences in terms of menstrual period regularity, menstrual flow normalcy, complication of sepsis, gynaecological infection, duration of infertility, types of infertility and previous treatments. However, the respondents with psychiatric morbidity were significantly more in terms of past history of induced abortion ($\chi^2 = 9.03$, p = 0.0026).

A comparison of the gynaecological characteristics of respondents with psychiatric morbidity in study and control groups (Table VI)

The two groups were not significantly different in terms of menstrual period regularity, menstrual flow normalcy and sepsis complication. However, significantly more respondents with psychiatric morbidity in the study group had history of induced abortion when compared with the control group ($\chi^2 = 8.81$, p = 0.0026).

Causes of infertility

In the study group, the commonest cause of infertility was tubal factor (tubal occlusion and tubo-peritoneal adhesion) (27.5%), male factor (azoospermia and oligospermia) (10.6%), Asherman syndrome (intra-uterine adhesion) (9.4%), hormonal factor (hyperprolactinaemia) (9.4%), uterine fibroid (9.4%), chronic pelvic inflammatory disease (8.1%), unexplained causes (10.0%) and multiple causes 8.8%. Asherman syndrome was the only aetiological factor that was significantly more common among respondents with psychiatric morbidity when compared with those without psychiatric morbidity ($\chi^2 = 4$, p = 0.0454).

Table II: Gynaecological characteristics of the study and control groups

Variables		*Study* $N_1 = 160$ (%)	*Control* $N_2 = 160$ (%)	χ^2	*p*
Menstrual period	None Regular Irregular	5 (3.1) 89 (55.6) 66 (41.3)	0 (0.00) 116 (72.50) 44 (27.50)	12.96	0.0015
Menstrual flow	Scanty Normal Heavy No flow	53 (33.1) 84 (52.5) 18 (11.3) 5 (3.3)	23 (14.4) 127 (79.4) 10 (6.3) 0 (0.0)	27.89	0.0000
Induced abortion	No Yes	80 (50.0) 80 (50.0)	128 (80.0) 32 (20.0)	30.4	0.0000
Post abortal Sepsis	$n_3 = 80$ (%) No Yes	$n_4 = 32$ (%) 63 (78.8) 17 (21.3)	22 (68.8) 10 (31.2)	0.76	0.3825
Gynaecological infection	No Yes	110 (68.8) 50 (31.2)	NA		
Infertility duration	0 – 4 5 – 9 10 – 14 15 – 19 20 – 24 Mean	94 (58.7) 31 (19.3) 23 (14.4) 10 (6.3) 2 (1.3) 5.41 ± 4.4	NA		
Type of infertility	Primary Secondary	35 (21.9) 125 (78.1)	NA		
Previous treatment	No Yes	61 (38.1) 99 (61.9)	NA		

% in row brackets NA = Variables not applicable for the control group

Table III: A comparison of socio-demographic characteristics of respondents with psychiatric morbidity in study and control groups.

Variables		*Respondents with psychiatric morbidity (study group) N = 78 (%)*	*Respondents with psychiatric morbidity (control group) n = 18 (%)*	χ^2	*p*
Age	20 – 24 25 – 29 30 – 34 35 – 39 40 – 44 Mean	1 (1.3) 21 (26.9) 27 (34.6) 20 (25.7) 9 (11.5) 32.29 ± 4.6	2 (11.1) 2 (11.1) 6 (33.3) 5 (27.8) 3 (16.7) 33.22 ± 5.5	0.54*	0.4632
Years of marriage	0 – 4 5 – 9 10 – 14 15 – 19 20 – 24 Mean	24 (30.8) 30 (38.5) 16 (20.5) 7 (8.9) 1 (1.3) 7.47 ± 4.7	5 (27.8) 5 (27.8) 8 (44.8) 0 (0.0) 0 (0.0) 8.27 ± 4.0	0.44*	0.5082
Number of children	0 1 – 2 3 – 4 > 5	47 (60.3) 29 (37.2) 2 (2.5) 0 (0.0)	0 (0.0) 7 (38.9) 11 (61.1) 0 (0.0)	5.57	0.016
Religion	Christianity Islam	35 (48.9) 43 (55.1)	11 (61.1) 7 (38.9)	0.96	0.3263
Social status	Group 1 Group 2 Group 3 Group 4 Group 5	0 (0.0) 8 (10.3) 32 (41.0) 30 (38.5) 8 (10.2)	0 (0.0) 1 (5.4) 4 (22.2) 11 (61.1) 2 (11.1)	NV	NV
Family Setting	Polygamous Monogamous	26 (33.3) 52 (66.7)	2 (11.1) 16 (88.9)	2.5	0.1136
Husband supportive	Yes No	57 (73.1) 21 (26.9)	16 (88.9) 2 (11.1)	1.23	0.2244
Husband's relative Supportive	Yes No	51 (65.4) 27 (34.6)	18 (100.0) 0 (0.0)	7.04	0.0079
Discrimination	Yes No	42 (53.8) 36 (46.2)	18 (100.0) 0 (0.0)	11.40	0.0007

% in row brackets, * = F – Statistics. NV = Not valid

Discussion

The study showed an infertility rate of 25.8%, with primary infertility constituting 21.9% while secondary infertility constituted 78.1%. A significant proportion of respondents in the study group had psychiatric morbidity (48.8%) when compared with those in the control group (11.2%) (χ^2 = 51.8; p =0.0001). This is higher than a rate of 35.2% previously reported in a gynecological clinic in the same hospital about a decade ago.[6] The prevalence of 48.8% of psychiatric morbidity found in this study is similar to 47.3% found in a recent study in the southern part of Nigeria.[16] However, this prevalence is less than a figure of 58.5% reported earlier in a previous study in the same environment.[6] This might be due to a better attitude to the problem of infertility, better rate of conception among those who seek treatment and increased emphasis on quality, rather than number of children in a family. It is worthy of note that there was no significant difference between the rate of psychiatric morbidity among patients with primary infertility 17 (48.6%) as compared to those with secondary infertility 61 (48.8%) (χ^2 = 0.03; p =0.87). Therefore, what seems important in the aetiology of psychiatric disorder in patients with infertility is not the inability to conceive but rather, the presence of psychosocial stressors such as absence of support from husband and his relations, presence of discrimination, and a history of induced abortion. Absence of support from husband and his relations and presence of discrimination have been reported in previous studies where unfair treatment by in-laws was shown to contribute to psychosocial problems of women with infertility.[17,18,19] Such factors could lead to misunderstanding among family members and between couples. The attendant psychosocial stress may affect Gonadotrophin Releasing Hormone (GRH) pulsatility which may lead to anovulatory cycles. It would appear that unless psychosocial stressors are reduced there may be a prolongation of infertility through a vicious cycle of infertility leading to psychosocial stress which tends to lead to anovulation which in turn leads to infertility.

Another factor that had a significant association with

Table IV: A comparison of gynaecological characteristics of respondents with psychiatric morbidity and those without psychiatric morbidity in the study group (N = 160).

Variables		*Respondents with Psychiatric morbidity* $n_1 = 78$ (%)	*Respondents without Psychiatric morbidity* $n_2 = 82$ (%)	χ^2	*p*
Menstrual period	None Regular Irregular	3 (3.8) 41 (52.6) 34 (43.6)	2 (2.4) 48 (58.6) 32 (39.0)	0.71	0.7006
Menstrual flow	Scanty Normal Heavy No flow	26 (33.3) 36 (46.2) 13 (16.7) 3 (3.8)	27 (32.9) 48 (58.6) 5 (6.1) 2 (2.4)	5.39	0.1452
Induced abortion	No Yes	29 (37.2) 49 (62.8)	51 (62.2) 31 (37 8)	9.03	0.0026
Sepsis complication	 No Yes	$n_3 = 49$ (%) 41 (83.7) 8 (16.3)	$n_4 = 31$ (%) 22 (71.0) 9 (29.0)	1.15	0.2833
Gynaecological infection	 No Yes	$n_1 = 78$ (%) 52 (66.7) 26 (33.3)	$n_2 = 82$ (%) 58 (70.7) 24 (29.3)	0.15	0.7011
Infertility duration	0 – 4 years 5 – 9 years 10 14years 15 - 19 years 20 – 24 years Mean	40 (51.3) 17 (21.8) 15 (19.2) 6 (7.7) 0 (0.0) 6.01 $\pm$ 4.4	54 (65.8) 14 (17.1) 8 (9.7) 4 (5.0) 2 (2.4) 4.83 $\pm$ 4.5	2.81*	0.0957
Types of infertility	Primary Secondary	17 (21.8) 61 (78.2)	18 (22.1) 64 (77.9)	0.030	.8671
Previous treatment	No Yes	24 (30.8) 54 (69.2)	37 (45.1) 45 (54.9)	2.91	0.0881

% in row brackets. * = F-Statistics

the presence of psychiatric morbidity among patients with infertility was a history of induced abortion. The importance of induced abortion as a contributing factor to presence of infertility has been reported in previous studies.[20,21,22] It was shown that about 50-80% of infertility in Nigeria is due to infection which usually damages the fallopian tubes.[19] Induced abortion carried out by unqualified personnel which subsequently becomes septic is responsible for a significant proportion of pelvic infections and fallopian tube damage. This might be due to very restrictive laws on abortion and strong moral and religious doctrines against it, even in the face of serious physical and psychological danger to the mother or baby. It would appear that there is a serious psychological burden due to guilt for those who opt for abortion especially when, in future, there is a problem of infertility. We suggest that there is a need for government to relax abortion laws as it presently exists in Nigeria. This becomes more pertinent if we realize that many women still undergo abortion by in clinics or other such centrees where unsafe instruments are used. The reality is that an avoidable number of women still die from induced abortion carried out by unqualified people while a significant number of those who survive have complications such as sepsis, infertility (with its attendant psychosocial problems) and psychiatric morbidity.

Conclusion

Psychiatric morbidity is significantly more common in patients with infertility than in those without. There was a significant association between psychiatric morbidity and absence of support from husband and his relations, presence of discrimination and a history of induced abortion. We suggest the need for public enlightenment on the importance of moral and psychological support for women with infertility, a need to establish more active and widely spread support and counseling centres for women with unwanted pregnancies, and a need to relax the highly restrictive abortion laws as presently constituted in Nigeria. Furthermore, greater effort should be made towards early screening and identification of cases of psychiatric morbidity among patients with infertility. These will go a long way in ensuring better mental health and potentially increase conception rates among women with infertility.

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Table V: A comparison of gynaecological characteristics of respondents with psychiatric morbidity in the study and control groups

Variables		*Respondents with psychiatric morbidity (study) n_1 = 78 (%)*	*Respondents with psychiatric morbidity (control) n_2 = 18 (%)*	χ^2	*p*
Menstrual period	None Regular Irregular	3 (3.8) 41 (52.6) 34 (43.6)	0 (0.0) 13 (72.2) 5 (27.8)	2.60	0.7006
Menstrual flow	Scanty Normal Heavy No flow	26 (33.3) 36 (46.2) 13 (16.7) 3 (3.8)	5 (27.8) 12 (66.7) 1 (5.6) 0 (0.0)	3.30	0.1452
Induced abortion	No Yes	29 (37.2) 49 (62.8)	14 (77.8) 4 (22.2)	8.81	0.0026
Septic complication	 No Yes	n_3 = 49 (%) 41 (83.7) 8 (16.3)	n_4 = 4 (%) 4 (100.0) 0 (0.0)	1.15	0.2833
Gynaecological infection	 No Yes	n_1 = 78 (%) 52 (66.7) 26 (33.3)	 NA		
Infertility duration	0 – 4 years 5 – 9 years 10 14 years 15 - 19 years 20 – 24 years Mean	40 (51.3) 17 (21.8) 15 (19.2) 6 (7.7) 0 (0.0) 6.01 $\pm$ 4.4	 NA		
Types of infertility	Primary Secondary	17 (21.8) 61 (78.2)	 NA		
Previous treatment	No Yes	24 (30.8) 54 (69.2)	 NA		

% = Percentage in row brackets. NA = Variable not applicable to control group

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